



Preserving Population Served

Aggregate Cap on Population Losses
Needed to Protect Existing Viewers in Repacking

September 22, 2014

June 2nd Public Notice



PUBLIC NOTICE



Federal Communications Commission

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INCENTIVE AUCTION TASK FORCE RELEASES UPDATED CONSTRAINT FILE DATA

USING ACTUAL CHANNELS AND STAFF ANALYSIS REGARDING PAIRWISE
APPROACH TO PRESERVING POPULATION SERVED

DA 14-677

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This Public Notice is one of a series of Public Notices that the Incentive Auction Task Force has released relating to the repackaging process, seeking to provide stations with a reference record on which the Commission can base its decisions

1. Update pair staff analysis to determine whether a reference station can be assigned a particular channel while preserving the reference station's coverage area and population served using a proxy channel instead of a proxy channel, and

2. Release a staff analysis of potential new aggregate interference to television stations under the Commission's adopted approach to preserving population served, based on pairwise or statewide comparisons. The analysis will compare the aggregate interference that stations will receive above a particular threshold to the aggregate interference they would receive if all stations received interference at or below that threshold. Stations that receive interference at or below the threshold will receive no more than 1 percent, and that the majority of stations received aggregate interference at well below the ~~the~~ ^{average} pairwise interference limit proposed by the Commission.

As noted in prior Public Notices, the data and information released today are based on preliminary assumptions necessary for completing the analysis, and are illustrative only. The Commission will begin final decisions regarding the repackaging process at a later date. This Public Notice and the attached Appendix relate only to the repackaging process, and specifically to the process' impact on stations' coverage and the accuracy of its analysis.

¹ See *Incentive Auction Task Force Release of Information Related to Repacking*, *American Broadcasters Association*, GN Docket No. 12-265, ET Docket No. 13-362, Public Notice, SF FCC-RDB-14-265 (2014) (Republishing, "Appendix A," *Additional Annex* of *Task Force Release of Information Related to Repacking*, *American Broadcasters Association*, GN Docket No. 12-265, ET Docket No. 13-362, Public Notice, SF FCC-RDB-14-265 (2014) (Republishing, "Appendix A," *Additional Annex* of *Task Force Release of Information Related to Repacking*, *American Broadcasters Association*, GN Docket No. 12-265).

² *Expanding the Economic and Revenue Opportunities for Spectrum Repackaging*, *Revenue Auction*, GN Docket No. 12-265.

³ *Report and Order*, FCC 14-54, para. 179 (2014) (Report and Order).

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- Public Notice provides results of staff analysis on preserving population served
 - Staff studied 100 repacking scenarios with calculations on actual channels versus proxy channels
 - None of the 100 plans involves new pairwise interference to TV stations greater than 0.5%
- Staff results show:
 - On average, 1% of stations receive interference above NAB's proposed 1% aggregate cap
 - No station received new aggregate interference above 2%



Problems with Staff Analysis

- At the outset, NAB commends FCC staff for release of the 100 repacking simulations
 - Simulations allowed for extensive industry analysis and review that will be helpful to achieving a successful incentive auction outcome
- The staff analysis has at least one major flaw: the results do not represent population loss or viewer impact of repacking
 - The analysis strangely ignores that the auction will involve the repacking of more than 1,000 stations, i.e., that viewers will lose service due to channel changes and interference
- Moreover, without a reasonable aggregate cap, the FCC has provided no metric to determine whether it has taken “all reasonable efforts” to protect broadcasters’ population served (in addition to coverage area)
 - This would violate the Spectrum Act and will leave tens of millions of viewers who rely solely on OTA television in the dark



NAB Analysis

- NAB undertook its own analysis, using the same exact methods used by the FCC staff – including TVStudy as is – but accounting for repacking to evaluate population served* for all stations on new channels
 - NAB randomly selected repacking profile #30 (of the 100)
 - We will conduct additional studies of any other channels upon request.
 - Compared population served of all stations on their new channel with population served on their current channel to calculate aggregate population loss
 - NB: NAB continues to urge FCC to release repacking and constraint file generation software, which will help stakeholder calculations exactly mirror staff efforts
- **Result:** Aggregate population losses larger than reported by staff

* "Population served" means "persons who reside within a station's coverage area at locations where service is not subject to interference from another station or stations." R&O para. 179



NAB Profile #30 Results

FCC Staff Analysis

- Station with Largest population loss of 1.38%
- 1.2% of all stations assigned have a population loss above 1%

NAB Analysis

- Station with largest population loss of 5.5% (2 stations*)
- 3.1% of all stations assigned have pop loss above 1%
- Only 112 stations out of 1,445 stations had same pop loss as reported in PN results

Profile 30 does NOT represent "worst case."

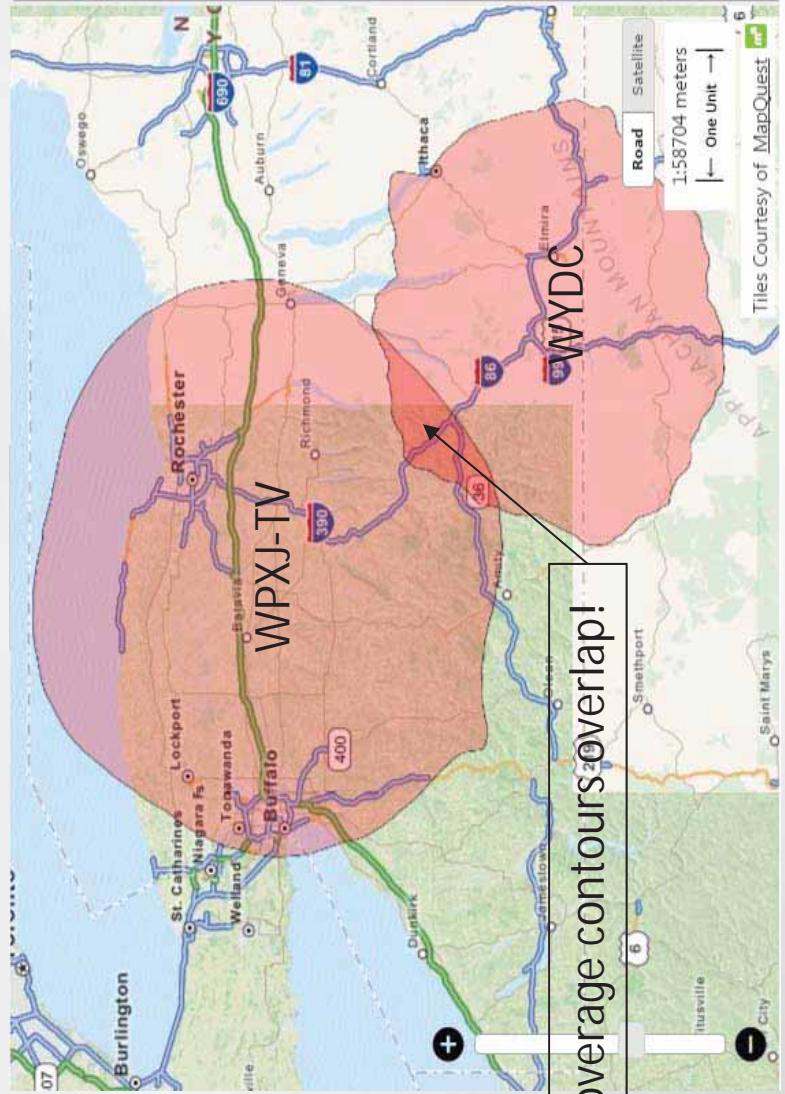
* KAEF, Arcata, CA and KSB-B-LP, Santa Barbara, CA

Additional Repacking/Population Loss Issue for Consideration





Example of Repacking Solution



Coverage contours overlap!

Ch	CallSign	Svc	Status	Licensor
48	WYDC	DT	LICEN	WYDC, INC.
23	WPXJ-TV	DT	LICEN	ION MEDIA BUFFALO LICENSE, INC.

Showing 1 to 2 of 2 entries

For complex filtered searches the pipe delimiter '|' may be used, e.g., "DT|ICA"

Above TV stations currently operate on different channels, Channels 23 and 48
FCC Constraints and Repacking solutions suggest above stations can operate on same channel



Additional Technical Problem

- Examination of the 100 scenarios revealed that some repacked stations were assigned the same channel and were located too close to each other. Such assignments are technically flawed.
- Example in Profile #30: Full Station WPXJ-TV in Batavia, NY was assigned to the same channel (ch. 14) that is just 106 km away from another full power station, WYDC in Corning, NY
 - This results in overlap of the station's coverage contours
- Problem is partly related to limitations in FCC constraint files *and* the fact that *TVStudy* does not consider or calculate interference for Error Code 3 cells



- NAB's position is to assume service for Error Code 3 cells
- Assumption of service DOES NOT mean to ignore interference and permit "free parking" for new interfering signals
 - Such approach does NOT meet reasonable efforts to preserve service
- Situations do not arise in current table of allotments because
 - Original DTV allotments were based on minimum spacing requirements
 - Rules require any new allotment to meet minimum spacing requirements (§73.623)
- Class A/LPTV stations must be outside contour of full power TV station (§74.706)
 - Several approaches available to fix constraint files to avoid these situations
 - Minimum spacing requirements for stations
 - Assume minimum signal level for service (Threshold + 3 dB) in Error Code 3 cells for interference evaluation and test for interference